

ABSTRACT OF THE DISCLOSURE

A vehicle body and frame assembly includes a closed channel structural member having an interior portion that can be pressurized under certain conditions, such as during a collision, to provide increased strength and absorb energy. A
5 pressurizing device communicates with the interior portion and contains a quantity of a chemical material that, when properly excited, will expand rapidly into a gaseous form. An igniter or other structure is provided for exciting the chemical material contained within the pressurizing device under predetermined conditions, such as when a collision occurs. The expansion of the chemical material into a gaseous form
10 rapidly increases the air pressure within the closed channel structural member, thus providing additional strength thereto to absorb energy during the collision. Although deformation of the closed channel structural member may occur as a result of the expansion of the chemical material, it is the containment of the highly pressurized gases within the closed channel structural member that increases the strength thereof
15 during the collision.